VeriSign PKI Client Government Edition v 1.5

End User's Guide

VeriSign, Inc.

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Contents

1 Introduction

VeriSign PKI Client is software for digital signing, authentication, and data protection with desktop-based applications.

For digital signing, authentication and data protection, VeriSign PKI Client uses a Digital ID, a digital certificate, that represents and verifies your identity. This Digital ID is stored on a smart card or your computer.

There are many types of security devices that work with VeriSign PKI Client, including USB smart cards and biometric devices. For simplicity, this guide uses the term *smart card* for all for these devices.

Once you have received a Digital ID, you can use it for Windows login and with Outlook, Adobe Acrobat, and other Windows applications.

VeriSign PKI Client Features

VeriSign PKI Client offers the following features for Windows and Windows applications:

- **Secure Windows Login** - You can log on to your computer using a Digital ID stored on your smart card.

- **Computer Lock and Unlock** - You can lock and unlock your computer using the Digital ID stored on your smart card.

- **Secure Email** - Using a Digital ID stored on your smart card or computer you can digitally sign, encrypt, and decrypt email in Outlook.

- **Digital Signing of Documents** - Using a Digital ID stored on your smart card or computer you can digitally sign, encrypt, and decrypt documents in Adobe Acrobat and Microsoft Word.

- **SSL Web Authentication** - You can authenticate to web sites using an SSL Digital ID stored on your smart card or computer with Internet Explorer and Mozilla FireFox.

2 Installing VeriSign PKI Client

This section explains how to install VeriSign PKI Client on your computer.

System Requirements

The following are the hardware and software requirements for using VeriSign PKI Client. If you will be using VeriSign PKI Client with a smart card, such as a PIV or CAC, you will need a smart card reader.

Hardware Requirements

- Pentium III processor or newer
- 512MB RAM (memory)
- 5MB free hard drive space

Operating System Requirements

- Windows XP service pack 3 (32-bt)
- Windows Vista service pack 2
- Windows 7 (32- and 64-bit)
- Windows 2003 release 2 (32- and 64-bit)
- Windows 2008 release 2 (32- and 64-bit)

Smart Card Requirements

- A Personal Identity Verification (PIV) or Common Access Card (CAC) smart card
- A USB PC/SC compliant smart card reader
- The smart card reader manufacturer's drivers or support software

Installing VeriSign PKI Client with Microsoft Installer

To install VeriSign PKI Client on your computer, you will need to have local, administrator privileges on your computer.

1. Locate the VeriSign PKI Client installer, which will have been given to you as a file archive (.ZIP) or CD-ROM. If you were given a file archive, extract it to a folder on your computer. For example, *C:\Windows\TempVeriSign-PKI-Client*.
2. Double-click the installer, VeriSign-PKI-Client-x86-1.5.msi.
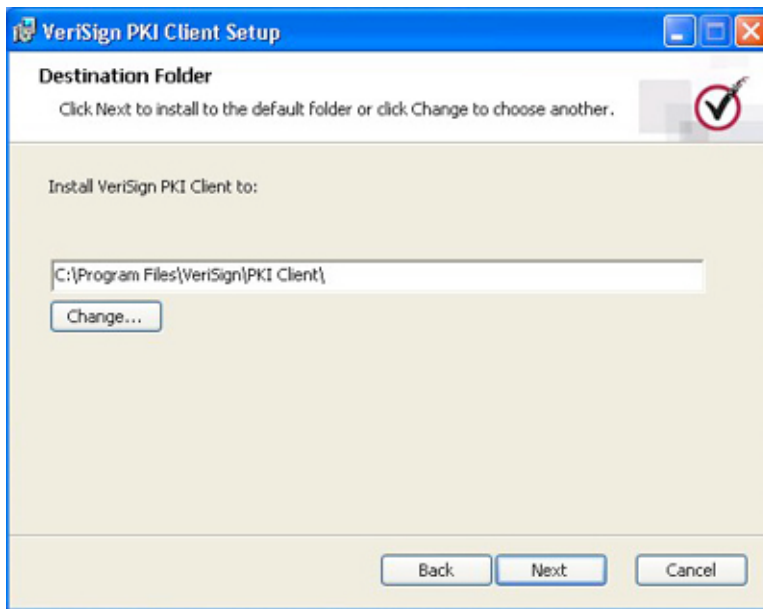3. In the installer, click **Next**.

Figure 2.1 - VeriSign PKI Client Installer

4. Read the End-User License Agreement, click the **I accept the terms in the License Agreement** box, and click **Next**.
5. Click **Next**.
6. Click **Install**.
7. Click **Finish**.

VeriSign PKI Client is now running. You can view it in the Windows notification area, also called the Windows tray (in the lower, right corner of your screen).

Figure 2.2 - VeriSign PKI Client Running

Un-installing VeriSign PKI Client

You may uninstall VeriSign PKI Client using the Control Panel:

1. Open the Control Panel (Start > Control Panel).
2. In the Control Panel, click **Add or Remove Programs**.
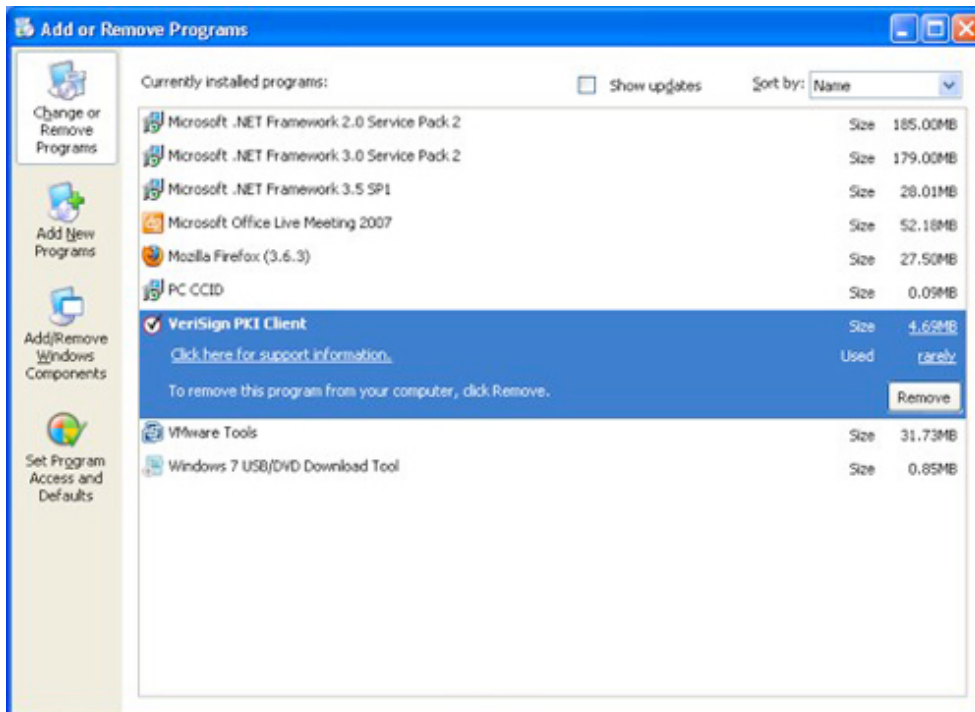3. Select VeriSign PKI Client in the list of installed programs.

Figure 2.3 – Uninstall

4. Click **Remove**.
5. When prompted to confirm removal of VeriSign PKI Client, click **Yes**.

3   Using PKI Client

VeriSign PKI Client automatically runs when you start Windows and is displayed in the notification area.

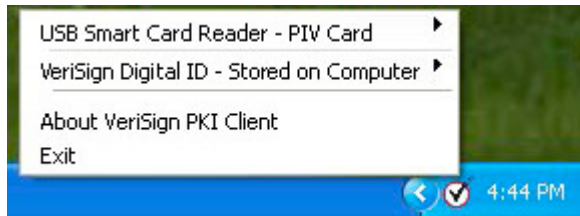Right-click the VeriSign check icon for the application menu.

Figure 3.1 - VeriSign PKI Client Menu

From this menu you can view and manage your Digital IDs, which is explained in the next section, *4. Managing Smart Cards and Digital Certificates*. You can also view information about the version of VeriSign PKI Client you are using.

Exiting VeriSign PKI Client

You can exit or quit VeriSign PKI Client from the notification area:

1. In the notification area, right-click the VeriSign PKI Client icon.
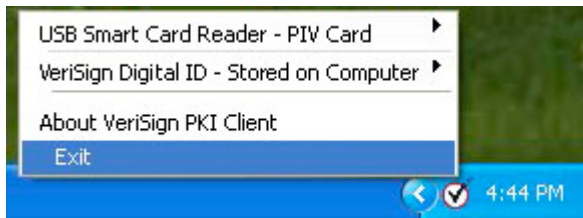2. Select **Exit**.

Figure 3.2 - Exit VeriSign PKI Client

VeriSign PKI Client allows you to view the Digital IDs stored on your smart card or computer. Your Digital IDs are automatically added to the Windows certificate store, which is used by Windows and other applications, like Microsoft Outlook.

Viewing a Digital ID

You can view information about your Digital ID from the notification area. For example, you may view more information about the Digital ID, also called certificate, that is used for Authentication:

1. In the Windows notification area, right-click the VeriSign PKI Client icon.

2. In the menu, select the smart card or Digital ID.

Figure 3.3 - Notification Area Menu

3. Select the Digital ID.
   A Windows Certificate dialog is displayed. In this dialog, you can view basic information about the Digital ID, such as the valid-to date. In the **Details** tab, you can view all information that is stored on the Digital ID.
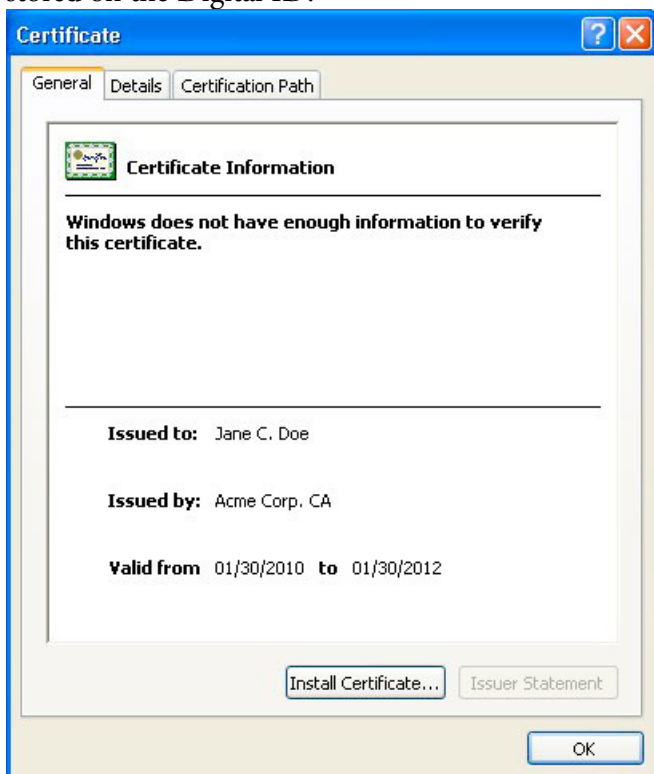

Figure 3.4 - Windows Certificate Dialog

4. After viewing the Digital ID information, click **OK**.

Managing Your PIN

From the notification area, you can verify and change the Personal Identification Number (PIN) for your smart card or Digital ID.

Verifying Your PIN

1. In the Windows notification area, right-click the VeriSign PKI Client icon.
2. In the menu, select the smart card or Digital ID.
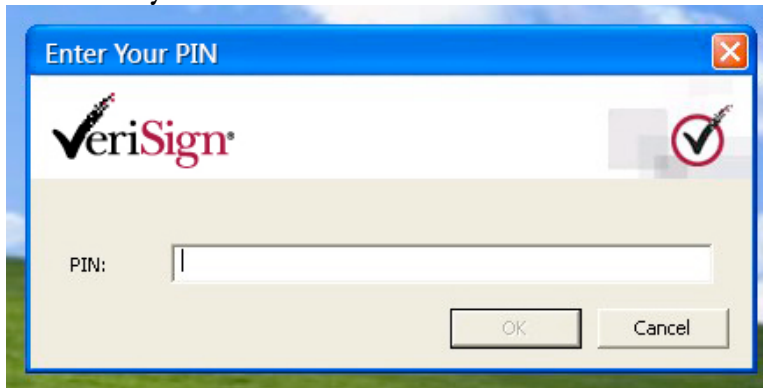
3. Select **Verify PIN**.

Figure 3.5 - Verify PIN Dialog

4. In the *Enter Your PIN* dialog, type your PIN.
5. Click **OK**. If the PIN you typed is correct, you will receive a success message. If the PIN you typed is incorrect, you will receive an error message and will need to retry.

CAUTION   Depending on the smart card or Digital ID you are using, you may only enter an incorrect PIN a few times. If you enter an incorrect PIN too many times, your smart card or Digital ID will be blocked and you will be unable to use it. If you block your PIN, you will either need to be issued a new smart card or have a system administrator unblock your smart card.

Changing Your PIN

1. In the Windows notification area, right-click the VeriSign PKI Client icon.
2. In the menu, select the smart card or Digital ID.
3. Select **Change PIN**.
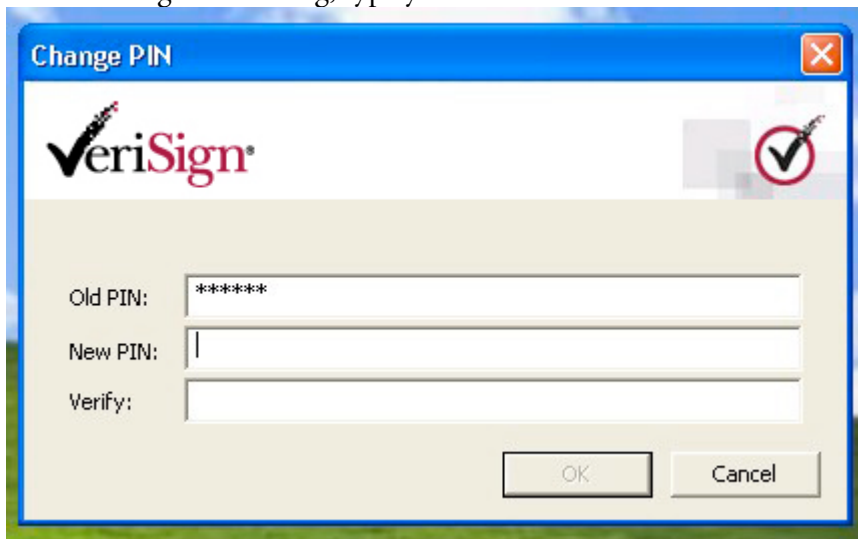4. In the Change PIN dialog, type your current PIN.

Figure 3.6 - Change PIN Dialog

5. In the **New PIN** field, type your new PIN.
6. In the **Verify PIN** field, type your new PIN a second time.

7. Click **OK**.

    If the PIN you typed is correct, you will receive a success message. If the PIN you type is incorrect or your new PINs do not match, you will receive an error message and will need to retry.

CAUTION   Depending on the smart card or Digital ID you are using, you may only enter an incorrect PIN a small amount of times. If you enter an incorrect PIN too many times, your smart card or Digital ID will be blocked and you will be unable to use it. If you block your PIN, you will either need to be issued a new smart card or have a system administrator unblock your smart card.

Renewing Expiring Digital IDs

When your Digital ID is close to expiring, you will receive a message in the Windows notification area. When you click this message, your Digital ID will be automatically renewed or you will be taken to a web site to complete the renewal.
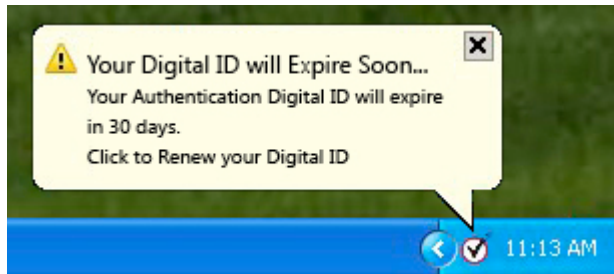

Figure 3.7 - Renew Digital ID Message

4   Sending Secure Email

You can both digitally sign and encrypt emails in Microsoft Outlook with your Digital ID. Your digital signature allows other people to verify that you sent them an email message and that the message has not been altered.

A digital signature alone does not make your message private. To make a message private with Outlook, you can encrypt it, which garbles the message text so no one beside the intended recipient can read it. The intended recipient will decrypt the message with her own Digital ID.

Note   For another person to read a message you have encrypted, you will need to exchange Digital IDs with this person. There are several ways to exchange Digital IDs, which are discussed in Microsoft's online help. Contact your system administrator to learn about the people in your organization that you already trust and can exchange secure email messages with.

VeriSign PKI Client will automatically set up Outlook to use your smart card or Digital ID for digital signatures and encryption. When you connect a smart card, Outlook will automatically start using the Digital ID(s) on this card for email security. If you have multiple Digital IDs and would like to specify the Digital ID that Outlook uses for either digital signatures or encryption, read *Choosing Digital IDs for Email Security* at the end of section.

What You Will Need

To use VeriSign PKI Client for secure email, you will need the following:

- Microsoft Outlook 2003 or 2007

- A Digital ID for digital signatures

- A Digital ID for encryption

These Digital IDs will already be stored on your smart card or computer, or you will be requested by your system administrator to enroll for them.

Using Digital Signatures with Outlook

You can digitally sign a single email message or all outgoing email messages.

Digitally Signing a Single Email

The first time you use a digital signature, make sure that the correct Digital ID is used:

1. Open Microsoft Outlook.
2. Create a new email message.
3. Open the *Message Options* dialog:
     - If you are using Outlook 2003, click Options, ⬜, in the message window.
     - If you are using Outlook 2007, click the expand icon, ⬜, in the Options section of the Message menu.
4. In the *Message Options* dialog, click **Security Settings**.

5. Click the **Add digital signature to this message** check box.
6. In the *Security setting* select box, select the **VeriSign, Inc. - Config** option.
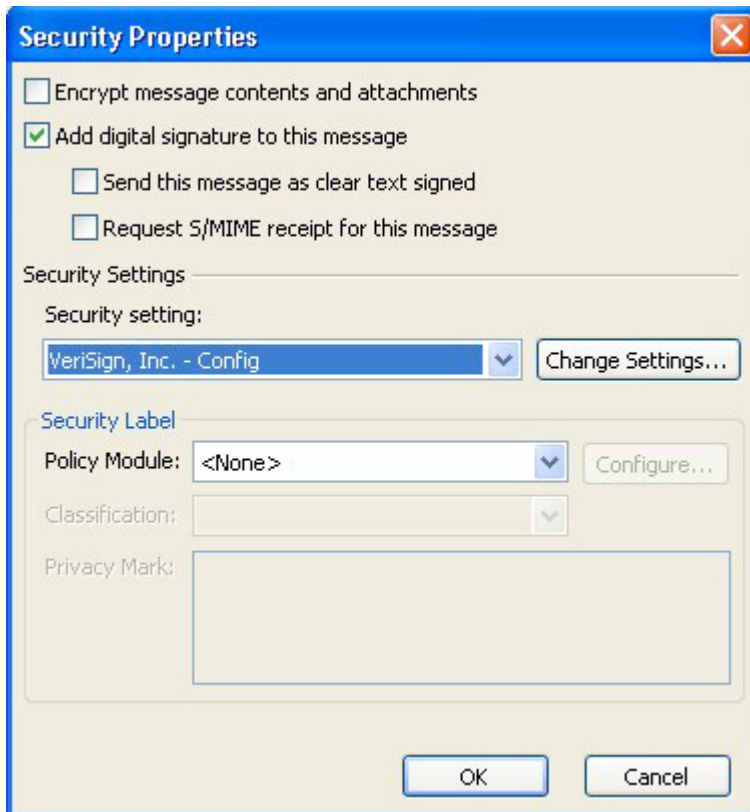

Figure 4.1 - Message Security Settings

7. Click **OK**.
8. Click **Close** in the *Message Options* dialog.
9. Compose your email message and then send it.
10. When prompted, enter your PIN.

For subsequent emails you can just click the sign icon:

1. Open Microsoft Outlook.
2. Create a new email message.
3. Click the Digitally Sign Message icon, .
4. Compose your email message and then send it.

Digitally Signing All Outgoing Email

1. Open Microsoft Outlook.
2. Open the email security settings:
    o   If you are using Outlook 2003, select **Options** in the *Tools* menu. Then click the **Security** tab.
    o   If you are using Outlook 2007, select **Trust Center** in the *Tools* menu. Then click **Email Security** in the left panel.
3. In the *Encrypted e-mail* section, click the **Send clear text signed message when sending signed messages** check box.
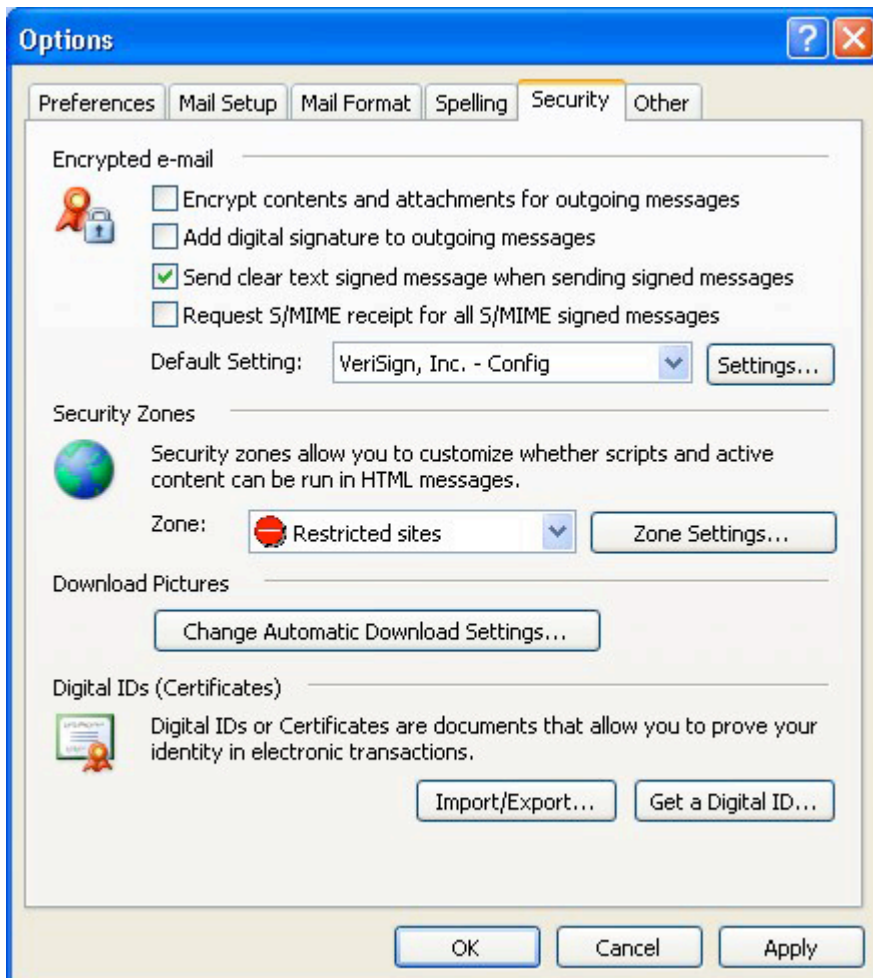

Figure 4.2 - Security Options

4. In the *Default Setting* box, select **VeriSign, Inc. - Config**.
5. Click **OK**.

Using Encryption with Outlook

You can enable encryption for a single email message or all outgoing messages.

Encrypting a Single Email

The first time you encrypt an email, make sure that the correct Digital ID is used:

1. Open Microsoft Outlook.
2. Create a new email.
3. Open the *Message Options* dialog:
    - o If you are using Outlook 2003, click Options, 📄, in the message window.
    - o If you are using Outlook 2007, click the expand icon, 🔲, in the Options section of the Message menu.
4. In the *Message Options* dialog, click **Security Settings**.
5. Click the **Encrypt message contents and attachments** check box.
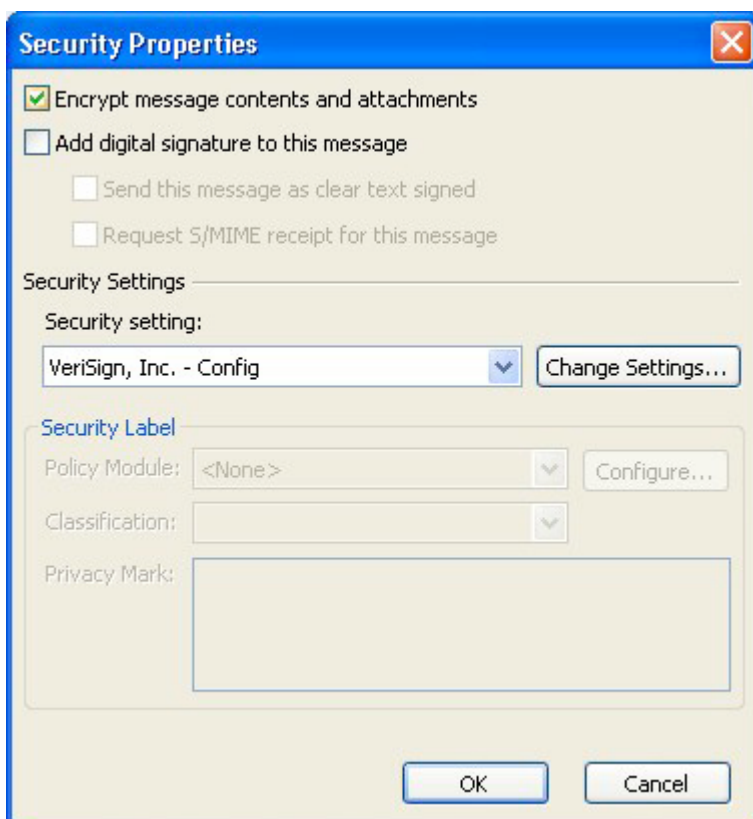6. In the *Security setting* select box, select the **VeriSign, Inc. - Config** option.

Figure 4.3 - Message Security

7. Click **OK**.
8. Click **Close** in the *Message Options* dialog.
9. Compose your email message and then send it.
10. When prompted, enter your PIN.

Encrypting All Outgoing Email

1. Open Microsoft Outlook.
2. Open the email security settings:
    o If you are using Outlook 2003, select **Options** in the **Tools** menu. Then click the **Security** tab.
    o If you are using Outlook 2007, select **Trust Center** in the **Tools** menu. Then click **Email Security** in the left panel.
3. In the Encrypted e-mail section, click the **Encrypt contents and attachments for outgoing messages** check box.
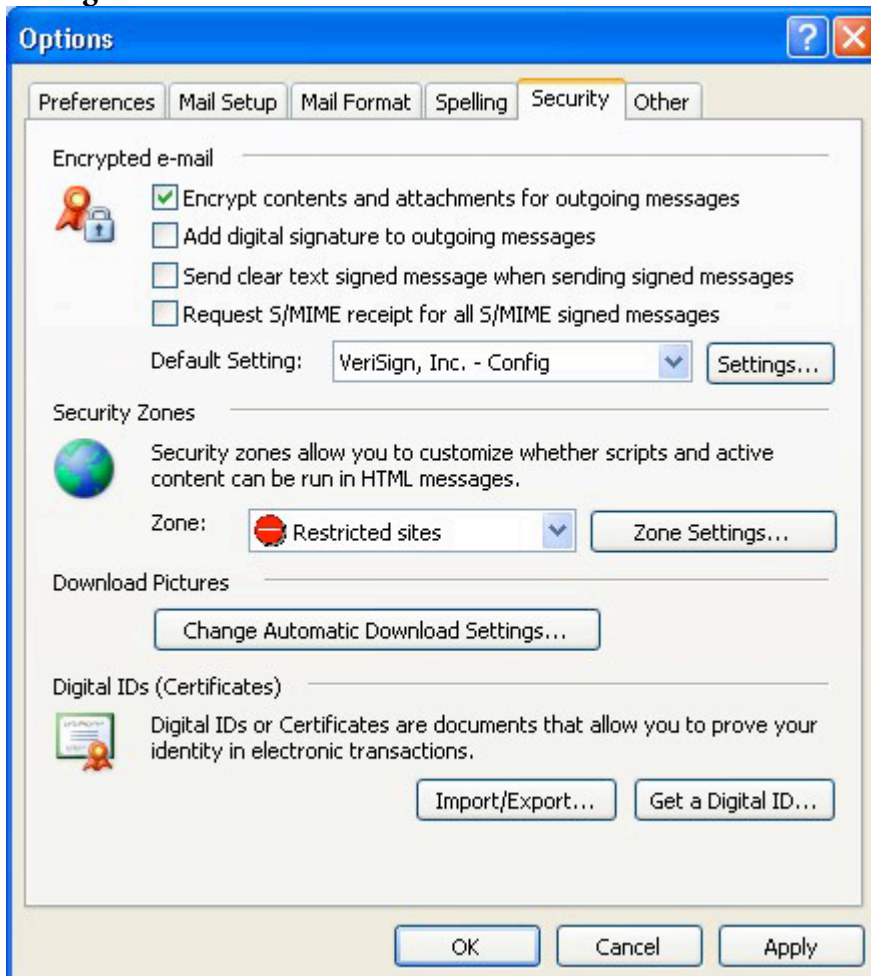

Figure 4.4 - Encrypt All Email Messages

4. In the **Default Setting** box, select "VeriSign, Inc. - Config."
5. Click **OK**.

Choosing a Digital ID for Email Security

If you have multiple Digital IDs for email signing or encryption, you can select the Digital ID that is used in the Microsoft Outlook settings:

1. Open Microsoft Outlook.
2. Open the email security settings:
   o If you are using Outlook 2003, select **Options** in the *Tools* menu. Then click the **Security** tab.
   o If you are using Outlook 2007, select **Trust Center** in the *Tools* menu. Then click **Email Security** in the left panel.
3. In the *Encrypted e-mail* section, click **Settings**.
   In the *Certificates and Algorithms* section you will see the signing and encryption certificates that are being used.

Figure 4.5 - Certificate and Algorithms

4. Click **Choose** in either the **Signing Certificate** or **Encryption Certificate** field.

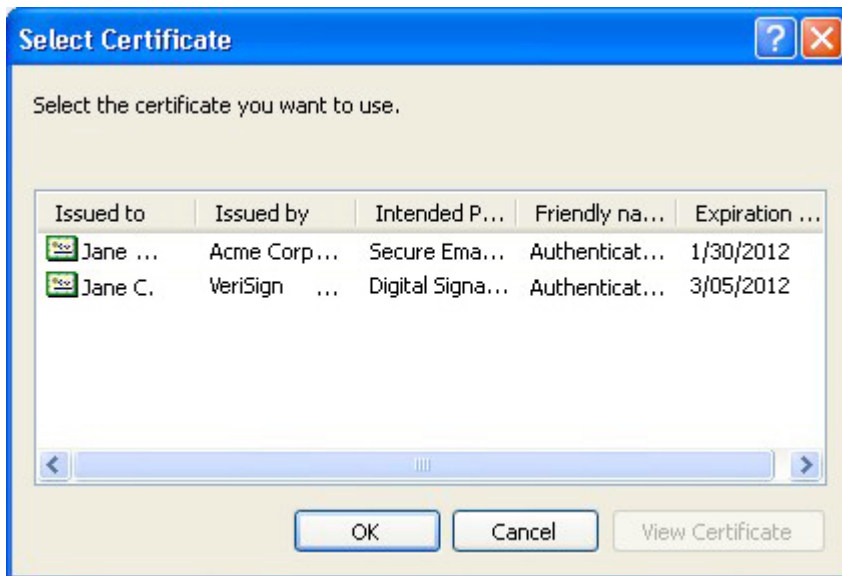   All Digital IDs that are available for use for signing and encryption will be shown.

Figure 4.6 - Select Certificate

5. Select the Digital ID you would like to use.
6. Click **OK** in each of the open dialogs.

5 Using Smart Card Log on

Each time you log on to Windows, you can use your PIV or CAC smart card for logon instead of a username and password. Smart card log on may be required by your organization.

You can log on to Windows using your PIV or CAC smart card.

What You Will Need

To use VeriSign PKI Client for Windows logon, you will need:

- To be a member of your organization's domain
- A PIV or CAC smart card
- A Digital ID for smart card logon

You will need to be a member of your organization's domain, which should be configured by your system administrator. This Digital ID will already be stored on your smart card, or you will be requested by your system administrator to enroll for it.

Logging on to Windows

1. Logout or restart Windows.

   At the Windows logon screen, you should see instructions for using your smart card: Insert card or press Ctrl-Alt-Delete to begin.

Figure 5.1 - Insert Smart Card

2. Insert your smart card.
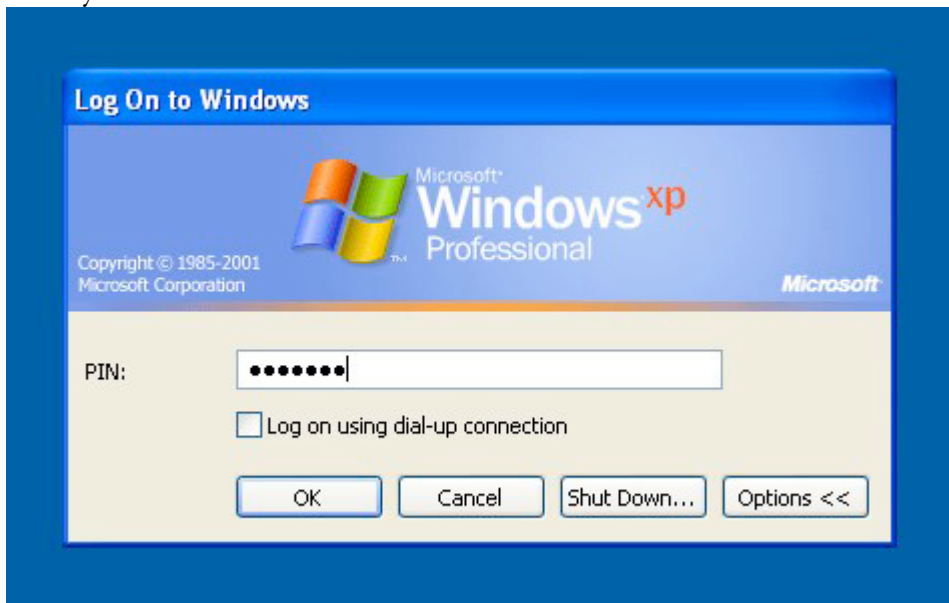
3. Enter your PIN.

Figure 5.2 - Enter PIN

4. Click **OK**.

6 Locking and Unlocking Your Computer

Your organization may require that your screen be automatically locked whenever you remove your smart card, and your system administrator will have set this up on your computer.

You will need to have a PIV or CAC smart card and be a member of your organization's domain.

Locking Your Computer

When you remove your smart card from your computer's smart card reader, your screen will be automatically locked.

Figure 6.1 - Computer Locked

Unlocking your Computer

To unlock your computer:

1. Insert your smart card.
2. Enter your PIN.

Figure 6.2 - Enter PIN

3. Click **OK**.

7 Signing Documents

You can digitally sign portable document format (PDF) documents with Adobe Reader and Adobe Acrobat Professional using your Digital ID. Your digital signature allows other people to verify that you created or made changes to a document, and allows them to see if the document has been altered since you signed it.

What You Will Need

To use VeriSign PKI Client to digitally sign PDF documents, you will need the following:

- Adobe Reader or Adobe Acrobat Professional

- A Digital ID for digital signatures

This Digital ID will already be stored on your smart card or computer, or you will be requested by your system administrator to enroll for it. If you are using Adobe Reader, the original creator of the PDF will need to have enabled digital signing of the document.

Signing Documents in Adobe Reader

1. Open Adobe Reader or Adobe Acrobat Professional.
2. Open the PDF that you will be signing.
3. Select **Sign** > **Sign Document** in the **Document** menu.
4. Click **OK** in the Adobe Reader dialog.
5. Click and draw a window where you would like to place the signature.
   The *Sign Document* dialog will appear and should show the Digital ID you use for signing in the **Sign As** box. You may also select another Digital ID at this time.
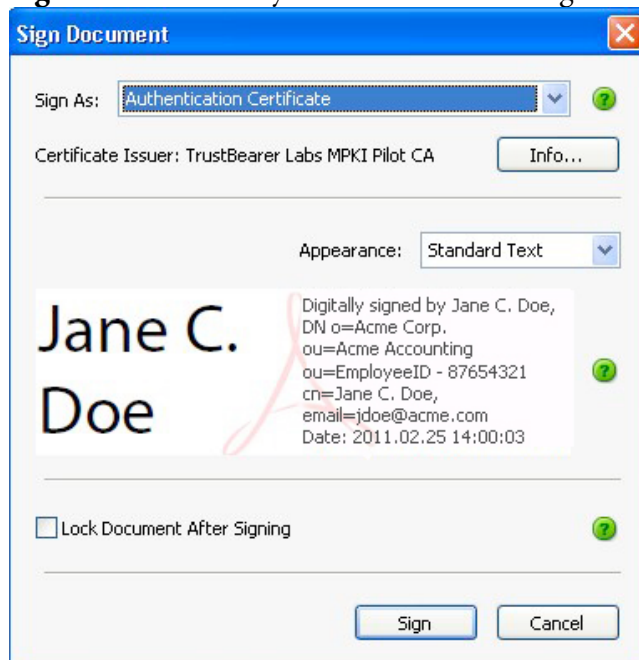

Figure 7.1 - Sign Document

6. Click **Sign**.
7. In the *Save As* dialog, save the document as a copy or replace the existing file and click **Save**.
8. When prompted, enter your Digital ID PIN.
   You will see the signature on the saved PDF. Similarly other people who view the PDF will see
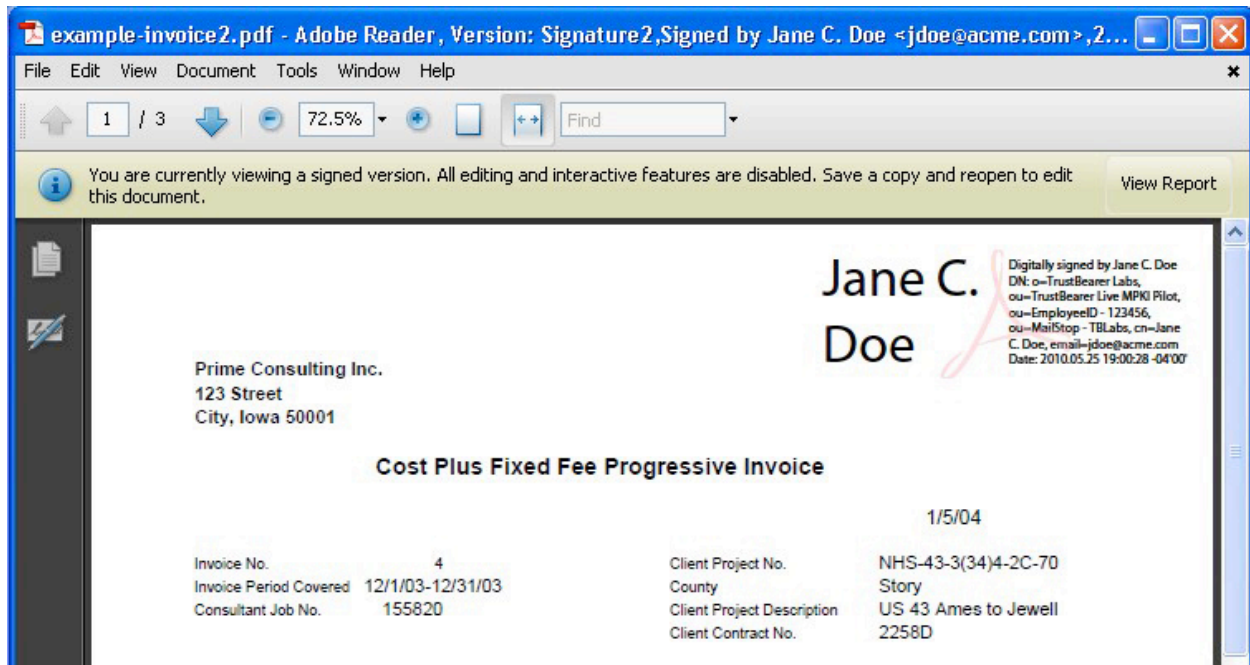   your signature and a message explaining that the document has been signed.

Figure 7.2 - Signed PDF

8 Using Virtual Private Networks

Virtual Private Network (VPN) technologies allow you to securely connect to a private company network from a remote location on the Internet. For example, you can securely connect to your home office from an insecure hotel WI-FI connection.

What You Will Need

- Cisco VPN Client

- A Virtual Private Network (VPN) Digital ID

Setting Up Cisco VPN Client

You or your system administrator will need to set up Cisco VPN Client with the correct connection settings, including host and connection information.

1. From the *Start* menu, open Cisco VPN Client.
2. Select **Advanced Mode** from the *Options* menu.

Figure 8.1 - Cisco VPN Client in Advanced Mode

3. From the *Connection Entries* menu, select **New**.
4. Type a unique name in the **Connection Entry** field.
5. Type a name in the **Description**.
6. In the **Host** field, enter the hostname or IP address of the location you will access.
7. Click the **Certificate Authentication** radio option.

8.   In the **Name** select box, select your VPN certificate.

Figure 8.2 - Cisco VPN Client Connection Settings

9.   Click **Save**.

10. Right-click the new connection entry and select **Connect**.

9 Accessing Secure Web Sites

You use Secure Socket Layer (SSL) technology whenever you visit a secure (https) web site. Just as your web browser tells you whether or not a web site should be trusted, you can use SSL to prove your identity to a web site.

Your organization may have an Internet or intranet web site that requires you to authenticate with a SSL Digital ID.

What You Will Need

You will need an SSL or Authentication Digital ID. This Digital ID will already be stored on your smart card or computer, or you will be requested by your system administrator to enroll for this Digital ID.

Authenticating to a Web site with Internet Explorer

When you visit a web site that requires SSL authentication, you will present your Digital ID:

1. Open Internet Explorer.
2. Enter the URL for the web site you will be accessing.

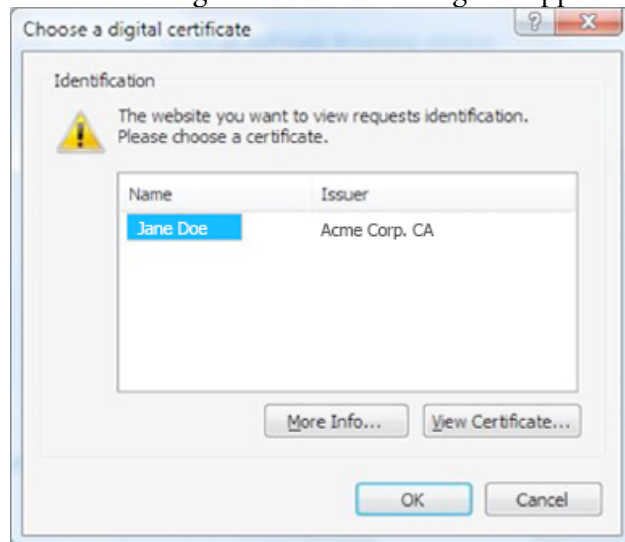   A Choose a Digital Certificate dialog will appear.

Figure 9.1 - Select Digital ID for SSL

3. From the list of Digital IDs, select your SSL/Authentication Digital ID.
4. Click **OK**.

   After you have selected the Digital ID you may be asked to enter your PIN. After you enter your PIN, the web site will be displayed.

Setting Up Web Authentication with Firefox

If you will be visiting a web site that requires SSL authentication with Mozilla Firefox, you need to configure Firefox to use VeriSign's software for smart cards:

1. Open Mozilla Firefox.
2. Open the Firefox Options dialog (Tools > Options).
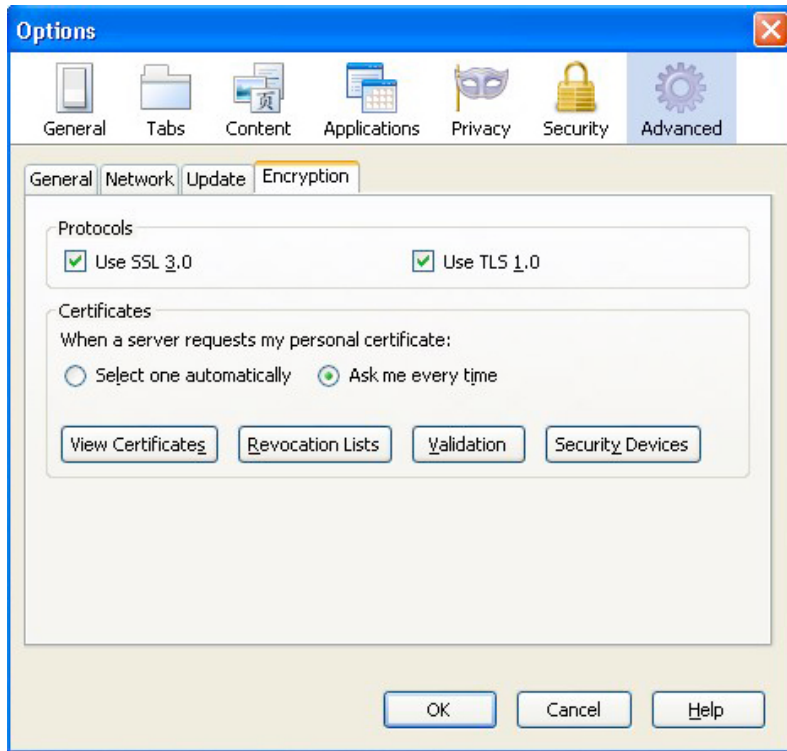3. Select the Advanced section.

Figure 9.2 - Firefox Advanced Options

4. Click the **Encryption** tab.
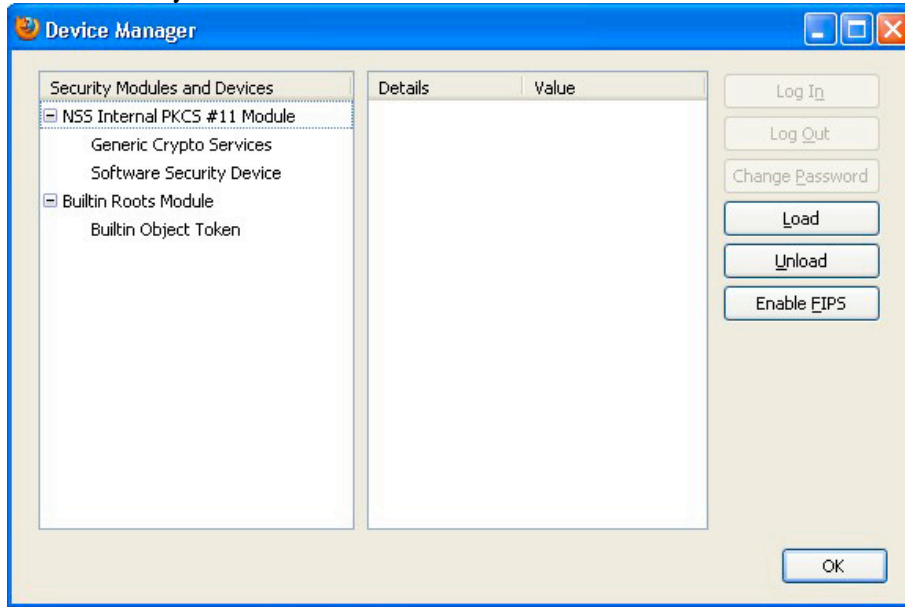
5. Click **Security Devices**.

Figure 9.3 - Firefox Device Manager

6. In the Device Manager dialog, click **Load**.
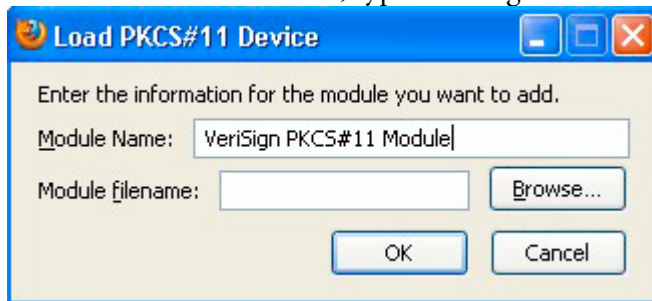7. In the **Module Name** field, type "VeriSign PKCS#11 Module"

Figure 9.4 - Firefox Device Manager

8. Click **Browse**.
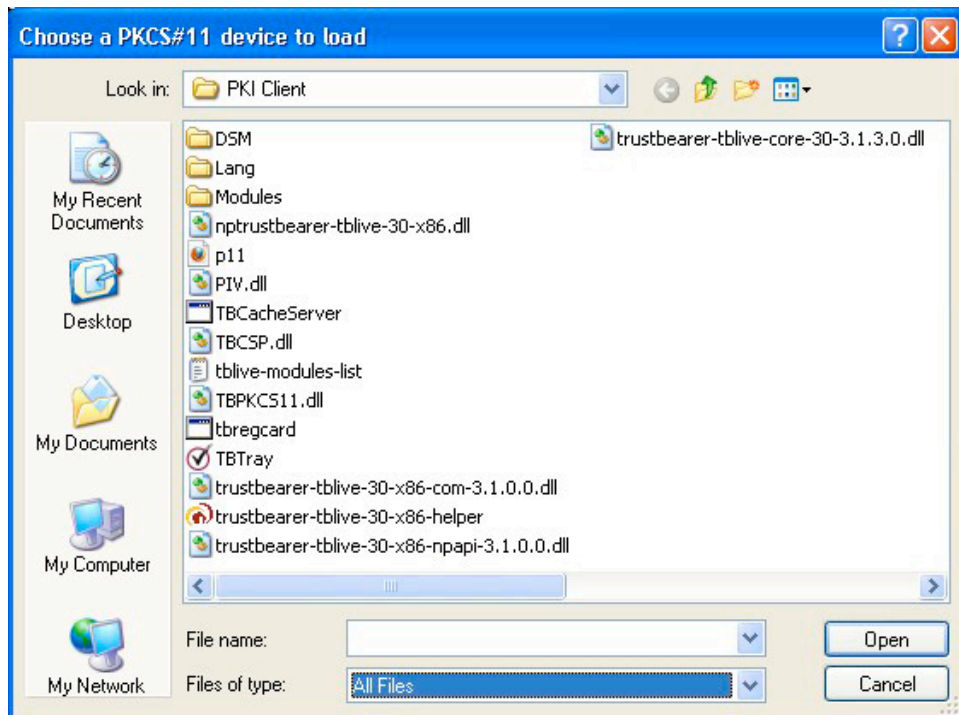9. Browse to the VeriSign PKI Client program files (C:\Program FilesVeriSign\PKI Client).

Figure 9.5 - VeriSign PKI Client Program Files

10. Select the file named "TBPKCS11.dll"
11. Click **Open**.

There will now be a new listing in the Security Modules and Devices list, which will include your smart card or Digital ID.
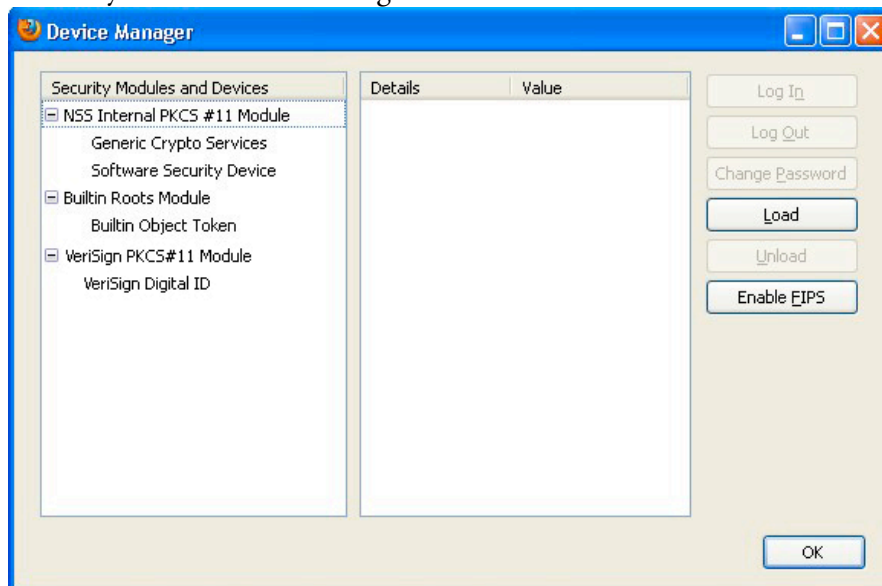

Figure 9.6 - VeriSign PKCS#11 Module Listed

12. Click **OK** in the Load PKCS#11 Device dialog.

13. Click **OK** in the Device Manger dialog.
14. Click **OK** in the Options dialog.

Your Digital ID will now be ready for use with Firefox. You can have Firefox automatically select this Digital ID (Otherwise, Firefox will prompt you to select it when you visit a web site that requires SSL authentication):

1. Open Mozilla Firefox.
2. Open the Firefox Options dialog (Tools > Options).
3. Select the Advanced section.
4. Click the **Encryption** tab.
5. In the Certificates section, click the **Select one automatically** radio option.
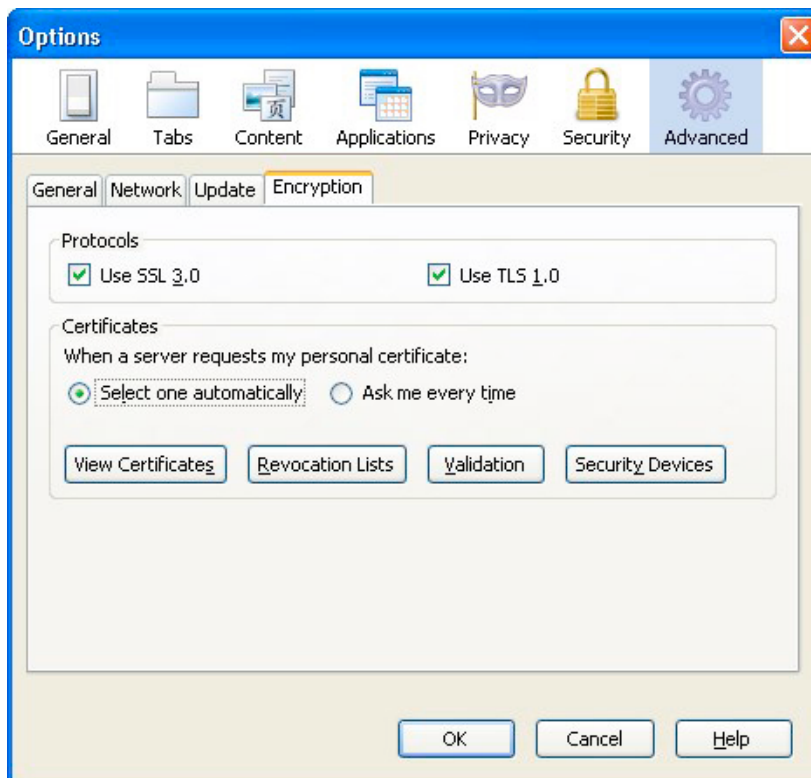

Figure 9.7 - Automatically Select Digital ID

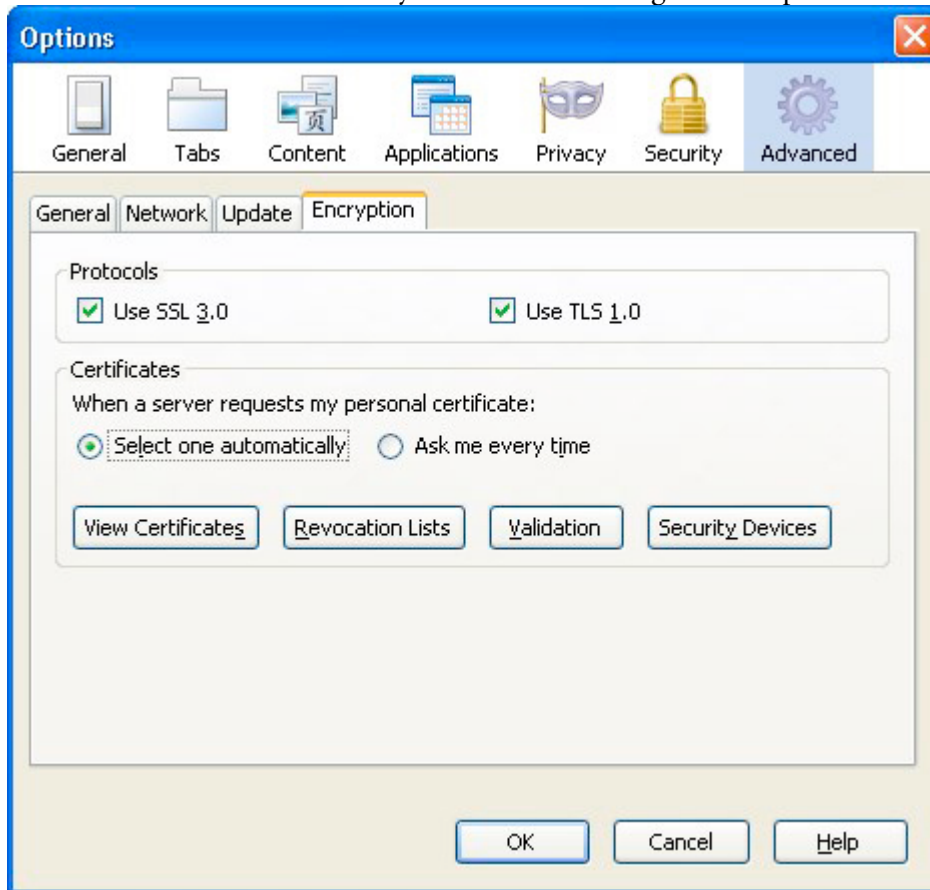6. Click **View Certificates** to verify that the correct Digital ID is present.

Figure 9.7 - Firefox SSL Certificates

7. Click **OK** in the Certificate Manager dialog.
8. Click **OK** in the Options dialog.